

SEQUENCE LISTING

<110> Kirschner, Marc W.
Kinoshita, Noriyuki

<120> Receptor-Ligand Assay

<130> HU95-01A2

<140> 08/776,207

<141> 1997-06-23

<150> PCT/US95/09172

<151> 1995-07-19

<150> 08/441,629

<151> 1995-05-15

<150> 08/279,217

<151> 1994-07-22

<160> 18

<170> FastSEQ for Windows Version 3.0

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<212> DNA

<213> Xenopus laevis

<400> 1

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atatcaatgc	ctttatggaa	aagcacattg	ttaaggaagg	agctgaaaca	aactgcaacc	240
aaaccatcaa	agacagaaac	atccggttta	aaaacaactg	caaattccgc	aacaccttta	300
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gacccccaaa	ttgtgcttat	aatcaaaaca	gaacaactgg	ggtcattaat	atcacttgtg	480
aaaacaatta	ccctgtgcac	tttgctgggt	acaaatcaag	cttctgtgct	tcatattctc	540
catgtgcctt	aataagtaata	actgttttcc	tgctcagcca	gctactgctc	cctgctatga	600
gatgatgccc	agaaacggga	gtatcaatag	ctaaaactag	aaggactgat	agtgatggat	660
gattgttcct	aagtcattta	gagatctacc	tgtgttcact	tccaaacaaa	gaagacatag	720
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<210> 2
 <211> 169
 <212> PRT
 <213> *Xenopus laevis*

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 Ile Ile Leu Ser Phe Ser Leu Pro Ser Asp Thr Gln Asn Ile Asn Ala
 20 25 30
 Phe Met Glu Lys His Ile Val Lys Gly Ala Glu Thr Asn Cys Asn
 35 40 45
 Gln Thr Ile Lys Asp Arg Asn Ile Arg Phe Lys Asn Asn Cys Lys Phe
 50 55 60
 Arg Asn Thr Phe Ile His Asp Thr Asn Gly Lys Lys Val Lys Glu Met
 65 70 75 80
 Cys Ala Gly Ile Val Lys Ser Thr Phe Val Ile Ser Lys Glu Leu Leu
 85 90 95
 Pro Leu Thr Asp Cys Leu Leu Met Gly Arg Thr Ala Arg Pro Pro Asn
 100 105 110
 Cys Ala Tyr Asn Gln Thr Arg Thr Gly Val Ile Asn Ile Thr Cys
 115 120 125
 Glu Asn Asn Tyr Pro Val His Phe Ala Gly Tyr Lys Ser Ser Phe Cys
 130 135 140
 Ala Ser Tyr Ser Pro Cys Ala Leu Ile Val Ile Thr Val Phe Leu Leu
 145 150 155 160
 Ser Gln Leu Leu Leu Pro Ala Met Arg
 165

<210> 3
 <211> 1633
 <212> DNA
 <213> *Xenopus laevis*

<400> 3
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 attttctctg ctaaacattt tatcaagcat tgcaaagggtg aaactttgcat gggactgaac 180
 tgtaatgacc caagggttatt ggaggcaatt aagagcaaca caatcaatca gctcttgcat 240
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 ttgggtatca cagacagtaa gaaattgaat agaaaatgct gtcagaatgg aggcacttgt 360
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 tattgtcttc ttactgcaaa cttgttttac cacatagttt ggcattctgaa tattggactt 660
 taacagagta acttgagtct gccagtcagg ttcagattgc agacgtctgt gtctacactg 720
 cactttcaat ttgtgaaccc attttgccag gattatgctt gaagtatatg gctatcttcc 780
 acccctggaa tcctggaaaa tatgcagaaa ctatacaatg ccttattttc attgggttgtt 840
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<210> 4
<211> 190
<212> PRT
<213> Xenopus laevis

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<400> 4
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Phe Ile Lys His Cys Lys Gly Glu Thr Cys Met Gly Leu Asn Cys Asn
          20          25          30
Asp Pro Arg Leu Leu Glu Ala Ile Lys Ser Asn Thr Ile Asn Gln Leu
          35          40          45
Leu His Asp Thr Ile Asn Ala Thr His Gly Lys Ser Pro Pro Lys Ser
          50          55          60
Thr Lys Thr Leu Pro Phe Leu Gly Ile Thr Asp Ser Lys Lys Leu Asn
          65          70          75          80
Arg Lys Cys Cys Gln Asn Gly Gly Thr Cys Phe Leu Gly Thr Phe Cys
          85          90          95
Ile Cys Pro Lys Gln Phe Thr Gly Arg His Cys Glu His Glu Arg Arg
          100          105          110
Pro Ala Ser Cys Ser Gly Val Pro His Gly Asp Trp Ile Arg Gln Gly
          115          120          125
Cys Leu Leu Cys Arg Cys Val Ser Gly Val Leu His Cys Phe Lys Pro
          130          135          140
Glu Ser Glu Asp Cys Asp Val Val His Glu Lys Asn Met Arg Ser Gly
          145          150          155          160
Val Pro Arg Met Gln Leu Ser Leu Ile Ile Tyr Cys Phe Leu Thr Ala
          165          170          175
Asn Leu Phe Tyr His Ile Val Trp His Leu Asn Ile Gly Leu
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<210> 5
 <211> 124
 <212> PRT
 <213> Bovine

<400> 5

Ala Gln Asp Asp Tyr Arg Tyr Ile His Phe Leu Thr Gln His Tyr Asp
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 Ala Lys Pro Lys Gly Arg Asn Asp Glu Tyr Cys Phe Asn Met Met Lys
 20 25 30
 Asn Arg Arg Thr Arg Pro Cys Lys Asp Arg Asn Thr Phe Ile His Gly
 35 40 45
 Asn Lys Asn Asp Ile Lys Ala Ile Cys Glu Asp Arg Asn Gly Gln Pro
 50 55 60
 Tyr Arg Gly Asp Leu Arg Ile Ser Lys Ser Glu Phe Gln Ile Thr Ile
 65 70 75 80
 Cys Lys His Lys Gly Gly Ser Ser Arg Pro Pro Cys Arg Tyr Gly Ala
 85 90 95
 Thr Glu Asp Ser Arg Val Ile Val Val Gly Cys Glu Asn Gly Leu Pro
 100 105 110
 Val His Phe Asp Glu Ser Phe Ile Thr Arg Pro His
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<210> 6
 <211> 131
 <212> PRT
 <213> Chinese Hamster

<400> 6

Val Gln Pro Ser Leu Gly Lys Glu Ser Ala Ala Met Lys Phe Glu Arg
 1 5 10 15
 Gln His Met Asp Ser Thr Val Ala Thr Ser Ser Ser Pro Thr Tyr Cys
 20 25 30
 Asn Gln Met Met Lys Arg Arg Asn Met Thr Gln Gly Gln Glu Cys Lys
 35 40 45
 Pro Val Asn Thr Phe Val His Glu Ser Leu Ala Asp Val His Ala Val
 50 55 60
 Cys Ser Gln Glu Asn Val Lys Cys Lys Asn Gly Lys Ser Asn Cys Tyr
 65 70 75 80
 Lys Ser His Ser Ala Leu His Ile Thr Asp Cys Arg Leu Lys Gly Asn
 85 90 95
 Ala Lys Tyr Pro Asn Cys Asp Tyr Gln Thr Ser Gln His Gln Lys His
 100 105 110
 Ile Ile Val Ala Cys Glu Gly Asn Pro Phe Val Pro Val His Phe Asp
 115 120 125
 Ala Thr Val
 130

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<210> 7
<211> 160
<212> PRT
<213> Mus musculus

<400> 7

Met Gly Tyr Phe Ser Ser Ser Val Val Leu Leu Val Ala Ile Ser Ser
1 5 10 15
Ala Phe Glu Phe Gly Pro Val Ala Gly Arg Asp Leu Ala Ile Arg Asp
20 25 30
Asn Ser Ile Trp Asp Gln Lys Glu Pro Ala Val Arg Asp Arg Ser Phe
35 40 45
Gln Phe Val Pro Ser Val Gly Ile Gln Asn Ser Lys Ser Leu Asn Lys
50 55 60
Thr Cys Cys Leu Asn Gly Gly Thr Cys Ile Leu Gly Ser Phe Cys Ala
65 70 75 80
Cys Pro Pro Ser Phe Tyr Gly Arg Asn Cys Glu His Asp Val Arg Lys
85 90 95
Glu His Cys Gly Ser Ile Leu His Gly Thr Trp Leu Pro Lys Lys Cys
100 105 110
Ser Leu Cys Arg Cys Trp His Gly Gln Leu His Cys Leu Pro Gln Thr
115 120 125
Phe Leu Pro Gly Cys Asp Gly His Val Met Asp Gln Asp Leu Lys Ala
130 135 140
Ser Arg Thr Pro Cys Gln Thr Pro Ser Val Thr Thr Thr Phe Met Leu
145 150 155 160

<210> 8
<211> 150
<212> PRT
<213> Homo sapien

<400> 8

Met Ala Ala Gly Ser Ile Thr Thr Leu Pro Ala Leu Pro Glu Asp Gly
1 5 10 15
Gly Ser Gly Ala Phe Pro Pro Gly His Phe Lys Asp Pro Lys Arg Leu
20 25 30
Tyr Cys Lys Asn Gly Gly Phe Phe Leu Arg Ile His Pro Asp Gly Arg
35 40 45
Val Asp Gly Val Arg Glu Lys Ser Asp Pro His Ile Lys Leu Gln Leu
50 55 60
Gln Ala Glu Glu Arg Gly Val Val Ser Ile Lys Gly Val Cys Ala Asn
65 70 75 80
Arg Tyr Leu Ala Met Lys Glu Asp Gly Arg Leu Leu Ala Ser Lys Cys
85 90 95
Val Thr Asp Glu Cys Phe Phe Phe Glu Arg Leu Glu Ser Asn Asn Tyr
100 105 110
Asn Thr Tyr Arg Ser Arg Lys Tyr Thr Ser Trp Tyr Val Ala Leu Lys
115 120 125
Arg Thr Gly Gln Tyr Lys Leu Gly Ser Lys Thr Gly Pro Gly Gln Lys
130 135 140

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Ala Ile Leu Phe Leu Pro
145 150

<210> 9
<211> 149
<212> PRT
<213> Bovine

<400> 9
Met Ala Glu Gly Glu Thr Thr Thr Phe Thr Ala Leu Thr Glu Lys Phe
1 5 10 15
Asn Leu Pro Leu Gly Asn Tyr Lys Lys Pro Lys Leu Leu Tyr Cys Ser
20 25 30
Asn Gly Gly Tyr Phe Leu Arg Ile Leu Pro Asp Gly Thr Val Asp Gly
35 40 45
Thr Lys Asp Arg Ser Asp Gln His Ile Gln Leu Gln Leu Cys Ala Glu
50 55 60
Ser Ile Gly Glu Val Tyr Ile Lys Ser Thr Glu Thr Gly Gln Phe Leu
65 70 75 80
Ala Met Asp Thr Asp Gly Leu Leu Tyr Gly Ser Gln Thr Pro Asn Glu
85 90 95
Glu Cys Leu Phe Leu Glu Arg Leu Glu Glu Asn His Tyr Asn Thr Tyr
100 105 110
Ile Ser Lys Lys His Ala Glu Lys His Trp Phe Val Gly Leu Lys Lys
115 120 125
Asn Gly Arg Ser Lys Leu Gly Pro Arg Thr His Phe Gly Gln Lys Ala
130 135 140
Ile Leu Phe Leu Pro
145

<210> 10
<211> 206
<212> PRT
<213> Homo sapiens

<400> 10
Met Ser Gly Pro Gly Thr Ala Ala Val Ala Leu Leu Pro Ala Val Leu
1 5 10 15
Leu Ala Leu Leu Ala Pro Trp Ala Gly Arg Gly Gly Ala Ala Ala Pro
20 25 30
Thr Ala Pro Asn Gly Thr Leu Glu Ala Glu Leu Glu Arg Arg Trp Glu
35 40 45
Ser Leu Val Ala Leu Ser Leu Ala Arg Leu Pro Val Ala Ala Gln Pro
50 55 60
Lys Glu Ala Ala Val Gln Ser Gly Ala Gly Asp Tyr Leu Leu Gly Ile
65 70 75 80
Lys Arg Leu Arg Arg Leu Tyr Cys Asn Val Gly Ile Gly Phe His Leu
85 90 95
Gln Ala Leu Pro Asp Gly Arg Ile Gly Gly Ala His Ala Asp Thr Arg
100 105 110

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Asp Ser Leu Leu Glu Leu Ser Pro Val Glu Arg Gly Val Val Ser Ile
 115 120 125
 Phe Gly Val Ala Ser Arg Phe Phe Val Ala Met Ser Ser Lys Gly Lys
 130 135 140
 Leu Tyr Gly Ser Pro Phe Phe Thr Asp Glu Cys Thr Phe Lys Glu Ile
 145 150 155 160
 Leu Leu Pro Asn Asn Tyr Asn Ala Tyr Glu Ser Tyr Lys Tyr Pro Gly
 165 170 175
 Met Phe Ile Ala Leu Ser Lys Asn Gly Lys Thr Lys Lys Gly Asn Arg
 180 185 190
 Val Ser Pro Thr Met Lys Val Thr His Phe Leu Pro Arg Leu
 195 200 205

<210> 11
 <211> 187
 <212> PRT
 <213> Xenopus laevis

<400> 11
 Met Thr Val Pro Ser Ala Leu Val Pro Ile Leu Leu Leu Gly Thr Ala
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 Ala Val Met Val Gln Cys Leu Pro Leu Ser Phe Gln Arg Asn Asp Thr
 20 25 30
 Val Glu Arg Arg Trp Glu Thr Leu Phe Ser Arg Ser Met Gly Glu Lys
 35 40 45
 Lys Asp Thr Ser Arg Asp Ser Asp Tyr Leu Leu Gly Ile Lys Arg Gln
 50 55 60
 Arg Arg Leu Tyr Cys Asn Val Gly Ile Gly Phe His Ile Gln Val Leu
 65 70 75 80
 Pro Asp Gly Arg Ile Asn Gly Met His Ser Glu Asn Arg Tyr Ser Leu
 85 90 95
 Leu Glu Leu Ser Pro Val Glu Val Gly Val Val Ser Leu Tyr Gly Val
 100 105 110
 Lys Ser Gly Met Phe Val Ala Met Asn Ala Lys Gly Lys Leu Tyr Gly
 115 120 125
 Ser Arg Tyr Phe Asn Glu Glu Cys Lys Phe Lys Glu Thr Leu Leu Pro
 130 135 140
 Asn Asn Tyr Asn Ala Tyr Glu Ser Arg Lys Tyr Pro Gly Met Tyr Ile
 145 150 155 160
 Ala Leu Gly Lys Asn Gly Arg Thr Lys Lys Gly Asn Arg Val Ser Pro
 165 170 175
 Thr Met Thr Leu Thr His Phe Leu Pro Arg Ile
 180 185

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<210> 12
<211> 198
<212> PRT
<213> Homo sapien

<400> 12
Met Ser Arg Gly Ala Gly Arg Leu Gln Gly Thr Leu Trp Ala Leu Val
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Phe Leu Gly Ile Leu Val Gly Met Val Val Pro Ser Pro Ala Gly Thr
20 25 30
Arg Ala Asn Asn Thr Leu Leu Asp Ser Arg Gly Trp Gly Thr Leu Leu
35 40 45
Ser Arg Ser Arg Ala Gly Leu Ala Gly Glu Ile Ala Gly Val Asn Trp
50 55 60
Glu Ser Gly Tyr Leu Val Gly Ile Lys Arg Gln Arg Arg Leu Tyr Cys
65 70 75 80
Asn Val Gly Ile Gly Phe His Leu Gln Val Leu Pro Asp Gly Arg Ile
85 90 95
Ser Gly Thr His Glu Glu Asn Pro Tyr Ser Leu Leu Glu Ile Ser Thr
100 105 110
Val Glu Arg Gly Val Val Ser Leu Phe Gly Val Arg Ser Ala Leu Phe
115 120 125
Val Ala Met Asn Ser Lys Gly Arg Leu Tyr Ala Thr Pro Ser Phe Gln
130 135 140
Glu Glu Cys Lys Phe Arg Glu Thr Leu Leu Pro Asn Asn Tyr Asn Ala
145 150 155 160
Tyr Glu Ser Asp Leu Tyr Gln Gly Thr Tyr Ile Ala Leu Ser Lys Tyr
165 170 175
Gly Arg Val Lys Arg Gly Ser Lys Val Ser Pro Ile Met Thr Val Thr
180 185 190
His Phe Leu Pro Arg Ile
195

<210> 13
<211> 219
<212> PRT
<213> Homo sapien

<400> 13
Met Ser Leu Ser Phe Leu Leu Leu Leu Phe Phe Ser His Leu Ile Leu
1 5 10 15
Ser Ala Trp Ala His Gly Glu Lys Arg Leu Ala Pro Lys Gly Gln Pro
20 25 30
Gly Pro Ala Ala Thr Asp Arg Asn Pro Ile Gly Ser Ser Arg Ser
35 40 45
Ser Ser Ser Ala Met Ser Ser Ser Ser Ala Ser Ser Ser Pro Ala Ala
50 55 60
Ser Leu Gly Ser Gln Gly Ser Gly Leu Glu Gln Ser Ser Phe Gln Trp
65 70 75 80
Ser Pro Ser Gly Arg Arg Thr Gly Ser Leu Tyr Cys Arg Val Gly Ile
85 90 95

FOOTNOTES

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Gly Phe His Leu Gln Ile Tyr Pro Asp Gly Lys Val Asn Gly Ser His
 100 105 110
 Glu Ala Asn Met Leu Ser Val Leu Glu Ile Phe Ala Val Ser Gln Gly
 115 120 125
 Ile Val Gly Ile Arg Gly Val Phe Ser Asn Lys Phe Leu Ala Met Ser
 130 135 140
 Lys Lys Gly Lys Leu His Ala Ser Ala Lys Phe Thr Asp Asp Cys Lys
 145 150 155 160
 Phe Arg Glu Arg Phe Gln Glu Asn Ser Tyr Asn Thr Tyr Ala Ser Ala
 165 170 175
 Ile His Arg Thr Glu Lys Thr Gly Arg Glu Trp Tyr Val Ala Leu Asn
 180 185 190
 Lys Arg Gly Lys Ala Lys Arg Gly Cys Ser Pro Arg Val Lys Pro Gln
 195 200 205
 His Ile Ser Thr His Phe Leu Pro Arg Phe Lys
 210 215

<210> 14
 <211> 190
 <212> PRT
 <213> Homo sapien

<400> 14

Met His Lys Trp Ile Leu Thr Trp Ile Leu Pro Thr Leu Leu Tyr Arg
 1 5 10 15
 Ser Cys Phe His Ile Ile Cys Leu Val Gly Thr Ile Ser Leu Ala Cys
 20 25 30
 Asn Asp Met Thr Pro Glu Gln Met Ala Thr Asn Val Asn Cys Ser Ser
 35 40 45
 Pro Glu Arg His Thr Arg Ser Tyr Asp Tyr Met Glu Gly Gly Asp Ile
 50 55 60
 Arg Val Arg Arg Leu Phe Cys Arg Thr Gln Trp Tyr Leu Arg Ile Asp
 65 70 75 80
 Lys Arg Gly Lys Val Lys Gly Thr Gln Glu Met Lys Asn Asn Tyr Asn
 85 90 95
 Ile Met Glu Ile Arg Thr Val Ala Val Gly Ile Val Ala Ile Lys Gly
 100 105 110
 Val Glu Ser Glu Phe Tyr Leu Ala Met Asn Lys Glu Gly Lys Leu Tyr
 115 120 125
 Ala Lys Lys Glu Cys Asn Glu Asp Cys Asn Phe Lys Glu Leu Ile Leu
 130 135 140
 Glu Asn His Tyr Asn Thr Tyr Ala Ser Ala Lys Trp Thr His Asn Gly
 145 150 155 160
 Gly Glu Met Phe Val Ala Leu Asn Gln Lys Gly Ile Pro Val Arg Gly
 165 170 175
 Lys Lys Thr Lys Lys Glu Gln Lys Thr Ala His Phe Leu Pro
 180 185 190

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<210> 15
<211> 183
<212> PRT
<213> Mus musculus

<400> 15
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20 25 30
Gly Gly Val Tyr Glu His Leu Gly Gly Ala Pro Arg Arg Arg Lys Leu
35 40 45
Tyr Cys Ala Thr Lys Tyr His Leu Gln Leu His Pro Ser Gly Arg Val
50 55 60
Asn Gly Ser Leu Glu Asn Ser Ala Tyr Ser Ile Leu Glu Ile Thr Ala
65 70 75 80
Val Glu Val Gly Val Val Ala Ile Lys Gly Leu Phe Ser Gly Arg Tyr
85 90 95
Leu Ala Met Asn Lys Arg Gly Arg Leu Tyr Ala Ser Asp His Tyr Asn
100 105 110
Ala Glu Cys Glu Phe Val Glu Arg Ile His Glu Leu Gly Tyr Asn Thr
115 120 125
Tyr Ala Ser Arg Leu Tyr Arg Thr Gly Ser Ser Gly Pro Gly Ala Gln
130 135 140
Arg Gln Pro Gly Ala Gln Arg Pro Trp Tyr Val Ser Val Asn Gly Lys
145 150 155 160
Gly Arg Pro Arg Arg Gly Phe Lys Thr Arg Arg Thr Gln Lys Ser Ser
165 170 175
Leu Phe Leu Pro Arg Val Leu
180

<210> 16
<211> 190
<212> PRT
<213> Homo sapien

<400> 16
Met Ala Pro Leu Gly Glu Val Gly Asn Tyr Phe Gly Val Gln Asp Ala
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20 25 30
Leu Ser Asp His Leu Gly Gln Ser Glu Ala Gly Gly Leu Pro Arg Gly
35 40 45
Pro Ala Val Thr Asp Leu Asp His Leu Lys Gly Ile Leu Arg Arg Arg
50 55 60
Gln Leu Tyr Cys Arg Thr Gly Phe His Leu Glu Ile Phe Pro Asn Gly
65 70 75 80
Thr Ile Gln Gly Thr Arg Lys Asp His Ser Arg Phe Gly Ile Leu Glu
85 90 95
Phe Ile Ser Ile Ala Val Gly Leu Val Ser Ile Arg Gly Val Asp Ser
100 105 110

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Gly Leu Tyr Leu Gly Met Asn Glu Lys Gly Glu Leu Tyr Gly Ser Glu
115 120 125
Lys Leu Thr Gln Glu Cys Val Phe Arg Glu Gln Phe Glu Glu Asn Trp
130 135 140
Tyr Asn Thr Tyr Ser Ser Asn Leu Tyr Lys His Val Asp Thr Gly Arg
145 150 155 160
Arg Tyr Tyr Val Ala Leu Asn Lys Asp Gly Thr Pro Arg Glu Gly Thr
165 170 175
Arg Thr Lys Arg His Gln Lys Phe Thr His Phe Leu Pro Arg
180 185 190

<210> 17
<211> 167
<212> PRT
<213> Mus musculus

<400> 17
Met Gly Ser Pro Arg Ser Ala Leu Ser Cys Leu Leu Leu His Leu Leu
1 5 10 15
Val Leu Cys Leu Gln Ala Gln His Val Arg Glu Gln Ser Leu Val Thr
20 25 30
Asp Gln Leu Ser Arg Arg Leu Ile Arg Thr Tyr Gln Leu Tyr Ser Arg
35 40 45
Thr Ser Gly Lys His Val Gln Val Leu Ala Asn Lys Arg Ile Asn Ala
50 55 60
Met Ala Glu Asp Gly Asp Pro Phe Ala Lys Leu Ile Val Glu Thr Asp
65 70 75 80
Thr Phe Gly Ser Arg Val Arg Val Arg Gly Ala Glu Thr Gly Leu Tyr
85 90 95
Ile Cys Met Asn Lys Lys Gly Lys Leu Ile Ala Lys Ser Asn Gly Lys
100 105 110
Gly Lys Asp Cys Val Phe Thr Glu Ile Val Leu Glu Asn Asn Tyr Thr
115 120 125
Ala Leu Gln Asn Ala Lys Tyr Glu Gly Trp Tyr Met Ala Phe Thr Arg
130 135 140
Lys Gly Arg Pro Arg Lys Gly Ser Lys Thr Arg Gln His Gln Arg Glu
145 150 155 160
Val His Phe Met Lys Arg Leu
165

<210> 18
<211> 158
<212> PRT
<213> Artificial Sequence

<220>
<223> artificial

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<400> 18

Met	Ala	Leu	Leu	Leu	Leu	Leu	Leu	Val	Pro	Gly	Pro	Gly	Ser	Thr	Thr
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Thr	Asn	Asp	Ala	Leu	Leu	Glu	Ser	Arg	Gly	Ser	Ala	Ala	Arg	Asp	Leu
			20					25					30		
Gly	Lys	Lys	Arg	Thr	Arg	Arg	Leu	Tyr	Cys	Arg	Val	Gly	Gly	Phe	His
		35					40					45			
Leu	Gln	Ile	Leu	Pro	Asp	Gly	Arg	Val	Asn	Gly	Thr	His	Glu	Ser	Asn
	50					55					60				
Arg	Tyr	Ser	Leu	Leu	Glu	Leu	Ser	Ala	Val	Glu	Val	Gly	Val	Val	Ser
65					70					75					80
Ile	Lys	Gly	Val	Glu	Ser	Gly	Leu	Phe	Leu	Ala	Met	Asn	Lys	Lys	Gly
			85						90					95	
Lys	Leu	Tyr	Ala	Ser	Lys	Lys	Phe	Thr	Glu	Glu	Cys	Lys	Phe	Lys	Glu
			100					105					110		
Arg	Leu	Leu	Glu	Asn	Asn	Tyr	Asn	Thr	Tyr	Ala	Ser	Ala	Lys	Tyr	Arg
		115					120					125			
Gly	Trp	Tyr	Val	Ala	Leu	Asn	Lys	Asn	Gly	Arg	Pro	Lys	Arg	Gly	Ser
	130					135					140				
Lys	Thr	Ser	Pro	Thr	Gln	Lys	Ala	Thr	His	Phe	Leu	Pro	Arg		
145					150					155					

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